

CLAIMS

1. A plate for imaging with an inkjet printer using pigment-based aqueous inkjet ink, comprising:
 - pre-treated aluminum base;
 - a first coating over said base, comprising organic-based polymer, said polymer capable of being dried to a hydrophilic film; and
 - a second coating over said first coating, said second coating deposited from water.
2. The plate according to claim 1, wherein said pre-treatment comprises pre-treatment with phosphoric acid.
3. The plate according to claim 1, wherein said first coating comprises an aqueous mixture of hydrophobic emulsion, surfactant, aminoplast, polyacrylic acid and polyvinyl alcohol.
4. The plate according to claim 1, wherein said second coating comprises a mixture of:
 - water-soluble hydrophilic polymer;
 - water-soluble hydroxyl containing organic compound;
 - solid, organic, non-ionic water-soluble and hydrophilic material;

and

binder resin.
5. The plate according to claim 4, wherein said water-soluble hydroxyl comprises between 95 and 99 percents parts by weight of said second coating.
6. The plate according to claim 4, wherein said binder resin comprises 0.5 to 5 percents parts by weight of said second coating.

7. The plate according to claim 4, wherein said solid, organic, non-ionic, water-soluble material comprises mono, di and tri saccharides.
8. The plate of claim 1, additionally comprising biocide.
9. The plate of claim 1, additionally comprising a silicone system that exists as an emulsion.
10. The plate of claim 1, additionally comprising a third coating, over said second coating, said third coating comprising less than 0.005 grams/square meter of silicone deposited from solvent.
11. A process for producing a plate for imaging with an inkjet printer using pigment-based aqueous inkjet ink, comprising the steps of:
 - providing a pre-treated aluminum base;
 - coating said base with a first organic-based polymer coating;
 - heating said first coating to create a dry hydrophilic film therefrom;and
 - coating said dried first coating with a second coating deposited from water.
12. A method of reduced dot-size imaging a plate with an inkjet printer, comprising the steps of:
 - producing a plate by using the process according to claim 11;
 - imaging said plate with said inkjet printer using pigment-based aqueous inkjet ink;
 - heating said imaged plate; and
 - removing said second coating.

13. The method according to claim 12, wherein said step of removing comprises washing said second coating with water.
14. The method according to claim 12, wherein said step of removing comprises treating said second coating with gum.
15. The method according to claim 12, wherein said step of removing comprises washing said second coating with fount during printing.